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## REPORT OF THE FEDERAL HORTICULTURAL BOARD.

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UNITED STATES DEPARTMENT OF AGRICULTURE,  
FEDERAL HORTICULTURAL BOARD,  
*Washington, D. C., September 17, 1915.*

SIR: I submit herewith an executive report covering the administration of the plant quarantine act for the fiscal year ended June 30, 1915.

Respectfully,

Hon. D. F. HOUSTON,  
*Secretary of Agriculture.*

C. L. MARLATT,  
*Chairman of Board.*

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### FEDERAL PLANT QUARANTINE ACT.

Under the Federal plant quarantine act of August 20, 1912, the entry of foreign nursery stock and other plants and plant products into the United States is regulated, and domestic and foreign quarantines on account of plant diseases and insect pests are established and maintained.

### ADMINISTRATION AND PERSONNEL.

#### FEDERAL HORTICULTURAL BOARD.

The personnel of the Federal Horticultural Board, which administers the act, is as follows: C. L. Marlatt, chairman, Bureau of Entomology; W. A. Orton, vice chairman, Bureau of Plant Industry; George B. Sudworth, Forest Service; W. D. Hunter, Bureau of Entomology; Karl F. Kellerman, Bureau of Plant Industry. R. C. Althouse, secretary of the board, has charge of the administrative office.

#### FEDERAL AND STATE INSPECTION SERVICE.

The Federal and State inspection service remains substantially the same as last year, the Federal work having been under the charge of Mr. E. R. Sasser and Mr. R. Kent Beattie. The number of State expert inspectors appointed as collaborators remains substantially the same as last year. Mr. H. B. Shaw remains as permanent inspector at the port of New York, where the great bulk of the nursery stock and other plant importations enters. His duties relate particularly to the inspection of plant importations from countries without inspection service and the inspection of potatoes and avocados offered for entry under the regulations requiring inspection.

Some minor work of an emergency character has been necessary in foreign countries in connection with foreign quarantines.

Similar field examinations and investigations have been necessary in connection with some of the domestic quarantines. This work has

been, for the most part, done in cooperation with the Bureau of Entomology and Plant Industry by special expert agents detailed from these bureaus.

#### COOPERATION WITH OTHER DEPARTMENTS.

The enforcement of the foreign quarantines has been greatly facilitated by the continued cooperation on the part of the State Department and the Treasury Department, and the machinery of the Post Office Department was utilized in the enforcement of both the foreign and domestic quarantines.

It is very gratifying to note that the strict compliance by postmasters with the order of the Post Office Department to return to the country and place of origin as prohibited all plants for propagation sent by mail has had a very salutary effect. Such sendings are becoming less and less frequent, thus closing a very important avenue of danger of introduction of plant pests.

At the request of this department the mails have also been closed to the importation of raw cotton lint.

#### LEGISLATION PROVIDING FOR TERMINAL INSPECTION OF INTERSTATE MAIL SHIPMENTS OF PLANTS AND PLANT PRODUCTS.

There was incorporated in the agricultural appropriation act for the fiscal year 1916, following the appropriation for the enforcement of the plant quarantine act, legislation providing, under certain conditions, for terminal inspection of plants and plant products transmitted interstate through the mails. No appropriation is made by Congress for this purpose and all expenses arising thereunder are to be paid by the States invoking the benefits of the provision. This legislation will enable a State to control plant diseases and insect pests contained in mail shipments of plants from without the State. Heretofore, while a State could protect itself by quarantining against plants and plant products of other States so far as shipments by freight or express of these articles was concerned, the mails left an avenue for the entry and distribution without inspection of the quarantined articles. The danger from this source was greatly increased by the advent of the parcel post.

Any State wishing to take advantage of this new legislation must establish and maintain a terminal inspection service of plants and plant products at one or more places therein. A list of plants and plant products and the plant pests transmitted thereby, which in the opinion of the proper officials of a State should be subject to terminal inspection in order to prevent the introduction and dissemination in said State of pests injurious to agriculture, is to be submitted to the Secretary of Agriculture. Upon his approval of said list, in whole or in part, the Secretary of Agriculture shall transmit the list as approved to the Postmaster General, and thereafter all packages containing any plants or plant products named in said approved list shall, upon payment of postage therefor, be forwarded by the postmaster at the destination of said package to the proper State official at the nearest place where inspection is maintained. If the plant or plant products are found upon inspection to be free from injurious pests, or, if infected, shall be disinfected by said official, they shall, upon payment of postage therefor, be returned to the postmaster at the place



of inspection to be forwarded to the person to whom they are addressed; but if found to be infected with injurious pests and incapable of satisfactory disinfection, the State inspector shall so notify the postmaster at the place of inspection, who shall promptly notify the sender of said plants or plant products that they will be returned to him upon his request and at his expense, or, in default of such request, that they will be turned over to the State authorities for destruction. The act requires all such packages to be plainly marked, so that their contents may be readily ascertained by an inspection of the outside thereof. Whoever fails to so mark said packages shall be punished by a fine of not more than \$100. Rules and regulations for carrying out the purposes of the above act have been prescribed by the Postmaster General. The State of California, which was particularly active in securing this legislation, was the first one to take advantage of its provisions. At least one other State is contemplating similar action.

### REVIEW OF THE WORK OF THE YEAR.

#### NEW PLANT QUARANTINES AND RESTRICTING ORDERS.

The domestic and foreign quarantines, described below, are additional or supplementary to the quarantines reported last year.

#### FOREIGN QUARANTINES.

**FOREIGN POTATO QUARANTINE.**—Amendment 5, promulgated November 30, 1914, to Quarantine No. 11, eliminates the Dominion of Canada from the provisions of Quarantine No. 11, and provides for the importation from the Dominion of Canada of potatoes free from potato wart and powdery scab, in accordance with the regulations prescribed under the order of the Secretary of Agriculture of December 22, 1913, governing the admission of foreign potatoes under restriction.

**CITRUS NURSERY STOCK QUARANTINE.**—Quarantine No. 19, promulgated December 10, 1914, forbids the introduction into the United States of all citrus nursery stock, including buds, scions, and seeds, from all foreign countries and localities, to prevent the further introduction into the United States of citrus canker and other dangerous citrus diseases.

**PINE QUARANTINE.**—Quarantine No. 20, promulgated March 1, 1915, forbids the importation into the United States on and after July 1, 1915, of all pines from all European countries and localities, to prevent the further introduction into the United States of the European pine-shoot moth (*Evetria buoliana*).

**INDIAN CORN QUARANTINE.**—Quarantine No. 21, promulgated March 8, 1915, forbids the importation into the United States of all Indian corn from Java and India, and Oceania except Australia and New Zealand, to prevent the introduction into the United States of a serious disease of Indian corn known as *Sclerospora maydis*.

#### DOMESTIC QUARANTINES.

**MEDITERRANEAN FRUIT FLY AND MELON FLY QUARANTINE.**—Amendment 1, promulgated April 2, 1915, to Quarantine No. 13, provides for the posting, at designated places, of a circular to be furnished by

the United States Department of Agriculture, calling attention to the provisions of the plant quarantine act, Quarantine No. 13, and the regulations prescribed therein.

**POWDERY SCAB OF POTATO.**—Quarantine No. 18, promulgated November 14, 1914, regulates the movement of potatoes from Clinton and Franklin Counties, N. Y., on account of the occurrence in these counties of the dangerous potato disease known as powdery scab (*Spongospora subterranea*). This quarantine order supplements Notice of Quarantine No. 14, issued April 25, 1914, designed to prevent the further distribution in the United States of powdery scab from certain portions of the State of Maine. The regulations governing the interstate movement of potatoes from areas quarantined for powdery scab, issued under the latter quarantine order, apply also to the area quarantined in the State of New York. These quarantines are administered under a special appropriation, providing for cooperation on the part of the States concerned.

**GIPSY MOTH AND BROWN-TAIL MOTH QUARANTINE.**—Quarantine No. 22, promulgated May 20, 1915, was originally issued November 5, 1912, as Quarantine No. 4, and has been revised and amended annually to include the new territory invaded by the gipsy moth and the brown-tail moth. This quarantine describes the districts in New England infested by the two moths named, and prohibits the movement in interstate commerce of plants and plant products except in accordance with the regulations prescribed therein. The spread of the brown-tail moth during the year was so slight that it was found unnecessary to extend the quarantine line on account of this insect. The gipsy moth, on the contrary, extended its range considerably, its principal spread, fortunately, being northward and eastward.

Hitherto the interstate shipment of Christmas trees and Christmas greens from the area infested with the gipsy moth to points outside the quarantined area was prohibited, owing to the extreme difficulty of making a thorough inspection of products of this character and the fact that an abundant supply was available outside of the gipsy-moth territory. Now that the gipsy-moth quarantine line has been considerably extended, and at the earnest and insistent request of Christmas-tree merchants and certain other interests, it was decided to give the shipment of such products a trial next season, and the regulations under the above quarantine order have been amended to provide for the inspection and certification for shipment of Christmas trees and greens.

As in former years, the cost of administering this quarantine was paid out of the special appropriation for preventing spread of moths, granted to the Bureau of Entomology.

**HAWAIIAN COTTON.**—Quarantine No. 23, promulgated June 11, 1915, forbids the movement from Hawaii into or through any other State, Territory, or District of the United States of raw or unmanufactured cotton lint except in accordance with the regulations prescribed therein, with the object of preventing the introduction into the continental United States of the pink bollworm (*Gelechia gossypiella*).

## ORDER RESTRICTING THE ENTRY OF COTTON LINT.

Under the authority contained in section 5 of the plant quarantine act an order placing restrictions on the importation of cotton lint into the United States, and regulations governing the importation of cotton lint under said order, were issued April 27, 1915. The object of this order is to prevent the entry into the United States with raw cotton of the pink bollworm and other injurious insects. In my report last year reference was made to the finding of living larvæ of the pink bollworm in seed contained in baled Egyptian cotton and of the consequent danger of the unrestricted use of such cotton. The regulations provide for the entry at northern ports only of foreign cotton under permit and for a system of notifications which enables the board to keep track of all imported cotton until it is consumed. No person, firm, or corporation is allowed to purchase, use, or store foreign cotton until a license therefor has been secured from the Secretary of Agriculture, and all licensees agree to fully comply with the requirements of the regulations, including the screening of all windows and other openings in the warehouse, opening and picker rooms, and the burning at the close of each day of all picker waste and seeds.

In addition to the precautions which are now being taken, all cotton arriving in this country on and after February 1, 1916, must be disinfected at port of entry by fumigation with hydrocyanic-acid gas in a vacuum, under the supervision of an inspector of the Department of Agriculture, before it will be released. Extensive experiments have demonstrated that such fumigation is entirely practicable and thoroughly effective in destroying all contained insect life, the gas penetrating to the innermost parts of the bale. Tests of yarn and fabric made from cotton so treated failed to show any injurious effect whatever as a result of this treatment.

Subsequent to the discovery of the occurrence of infested seed in baled Egyptian cotton, cotton importers and cotton manufacturers have heartily cooperated with the department in its effort to prevent the establishment of the pink bollworm in the United States, and during the past year practically every mill using foreign cotton has, at the suggestion of this department, been burning the picker waste from such cotton.

The cotton-lint regulations referred to above do not apply to the States of Nuevo Leon, Coahuila, Durango, Chihuahua, Tamaulipas, and Lower California, Mexico.

## NURSERY-STOCK IMPORTATIONS.

There has been no material change in the system of control of imported nursery stock established in the first year of the enforcement of the plant quarantine act.



## FOREIGN COUNTRIES MAINTAINING INSPECTION SERVICE.

The following countries have provided for inspection and certification in conformity with the regulations under the plant quarantine act:

Australia.  
Barbados.  
Belgium.  
Bermuda.  
British Guiana.  
Canada.  
Cuba.  
Denmark.  
England.  
France.  
Germany.  
Guatemala.  
Holland.

Ireland.  
Italy—Province of Padova  
(Padua) only.  
Jamaica.  
Japan.  
Leeward Islands:  
  Antigua.  
  St. Christopher-Nevis.  
  Dominica.  
  Montserrat.  
  Virgin Islands.  
Grand Duchy of Luxem-  
burg.

New Zealand.  
Philippine Islands.  
Scotland.  
Union of South Africa.  
Spain.  
Straits Settlements.  
Switzerland.  
Trinidad.  
Wales.  
Windward Islands:  
  Granada.  
  St. Lucia.  
  St. Vincent.

This list includes practically all of the countries which have hitherto maintained any considerable commercial trade in nursery stock with the United States. Any other country may obtain the privilege of commercial exportation to the United States by providing an inspection service.

Both importers and exporters of nursery stock generally have made an honest effort to comply with the law and to meet all of its requirements, and in only a few instances has it been necessary to return shipments of nursery stock or to destroy the stock on account of infestation.

## DISTRIBUTION OF IMPORTED NURSERY STOCK, BY STATES.

The following table indicates the distribution, by States, of nursery stock imported during the fiscal years 1913-14 and 1914-15:

*Distribution of imported nursery stock, by States.*

State.	Number of cases.		State.	Number of cases.	
	1914-15	1913-14		1914-15	1913-14
Alabama.....	241	125	Montana.....	20	26
Arizona.....	4	4	Nebraska.....	217	149
Arkansas.....	95	11	Nevada.....	1	2
California.....	3,357	1,929	New Hampshire.....	53	57
Colorado.....	150	152	New Jersey.....	8,829	10,458
Connecticut.....	1,372	1,432	New Mexico.....	1	1
Delaware.....	40	38	New York.....	12,669	12,363
District of Columbia <sup>1</sup> .....	549	562	North Carolina.....	80	162
Florida.....	2,461	56	North Dakota.....	12	8
Georgia.....	228	196	Ohio.....	3,374	3,068
Hawaii.....	20	4	Oklahoma.....	15	13
Idaho.....	5	9	Oregon.....	480	560
Illinois.....	3,316	3,942	Pennsylvania.....	6,556	9,309
Indiana.....	569	545	Rhode Island.....	741	606
Iowa.....	1,066	394	South Carolina.....	39	41
Kansas (north).....	51	48	South Dakota.....	16	16
Kansas (south).....	292	286	Tennessee.....	197	200
Kentucky.....	320	352	Texas.....	139	184
Louisiana.....	400	416	Utah.....	27	35
Maine.....	42	51	Vermont.....	24	20
Maryland.....	756	553	Virginia.....	354	338
Massachusetts.....	4,221	5,115	Washington.....	403	482
Michigan.....	1,562	1,232	West Virginia.....	87	102
Minnesota.....	701	528	Wisconsin.....	430	334
Mississippi.....	23	35			
Missouri.....	592	676	Total.....	57,192	57,525

<sup>1</sup> In addition to the commercial shipments referred to above, some 1,800 departmental importations for scientific purposes have been inspected by inspectors of the Federal Horticultural Board.



COUNTRY OF ORIGIN AND NATURE OF NURSERY-STOCK IMPORTATIONS.  
*Country of origin and classes of plants and seeds imported during the year ended June 30, 1915.*

Country.	Fruit trees.	Fruit-tree stocks.	Grape-vines.	Bush fruits.	Roses.	Rose stocks.	Forest and ornamental deciduous trees.	Ornamental deciduous shrubs.	Coniferous trees other than pines.	Pines.	Ever-green trees.	Ever-green shrubs.	Field-grown florists' stock.	Stocks, cuttings, or seedlings.	Tree seeds.
Argentina Republic.							12								
Australia.							5								
Austria.															
Bahamas.	22		10		12										
Bahama Islands.															
Belgium.	197			63	3,899		5,080	31,744	53,344		15,217	800,523	143,017	405	6,667
Bolivia.								1,001	56				2,534		254,001
Brazil.													4,930		501
Canada.	897			447	325		41	503	197			25	20		545
China.	24												15		
Colombia.													73,420		
Costa Rica.													100		
Cuba.			3					4,000				2	1,131,511		95
Denmark.					22,444			2,501							
England.	16,974			94,629	535,200	2,823,100	23,535	1,377	253,349	12,442	23,737	45,688	15,977	1,212	
France.	3,062,119	3,750	351	70,136	235,090	2,400,049	711,221	2,733,630	699,398	79,277	90,147	510,368	115,300	8,702,324	40,053
Germany.	85			40	49,344	2,000	111,550	5,557				8,067	1,351		821
Grand Duchy of Luxembourg.					4,000										
Guatemala.															
Holland.	103,518			11,311	2,503,834	154,640	393,220	784,279	353,376	36,175	86,374	1,231,905	4,107	3,000	
Honduras.			406										276,632	408,343	6
Hungary.					15								21		
India.															
Ireland.					98,186	100,000	35					1,300	622	41	2
Italy.	56		790		24	20,000	5	8,000	5			9	15	346	612
Jamaica.													300		
Japan.	37,167		30	29	12		41,105	15,171	11,232	2,712	7,507	8,311	96,621	4,753	1,325
Leeward Islands.		132													90
Mexico.	200						100	2				6	211		
New South Wales.													324		
New Zealand.													13,735		8,075
Nicaragua.								9,000				100	61		
Norway.					1				1,000						
Panama.															
Philippine Islands.													11,700		151
Scotland.	301		105	15,401	14,100	300,025	1,375	3,109	5,500		1,066	2,713	8,927		
Sweden.	2							2	18		10	404	1,793		
Switzerland.	12				2										
Trinidad.								5							
Venezuela.															
Total.	3,821,574	21,645,672	81,072	192,056	3,516,568	5,898,814	1,287,274	3,612,931	1,377,945	130,606	224,165	2,608,887	1,958,587	9,184,840	322,628

## RESULTS OF STATE AND FEDERAL INSPECTION OF IMPORTED PLANTS AND PLANT PRODUCTS.

As the result of State and Federal inspection the following pests were intercepted during the year: Egg masses of the gipsy moth were taken on six different occasions on stock received from Belgium, Holland, and Japan. Nests of the brown-tail moth were detected on three consignments of nursery stock, one from Ireland and two from France. Puparia of the European tussock moth (*Notolophus antiqua*) have been frequently collected on stock from France and Holland. The European pine-shoot moth (*Evetria buoliana*), which is a serious enemy to pine forests in Europe, has been detected on pine seedlings from Holland on no less than 23 different shipments. A closely related species, *E. resinella*, has also been taken on pine seedlings from Holland. Citrus stock from Brazil was found infested with one of the white flies, *Aleurothrixus floccosa*, which is not as yet established in the States. The same material was also infested with an undescribed chaff scale (*Parlatoria* sp.). Citrus cuttings from the Philippine Islands exhibited a thick infestation of the black chaff scale (*Parlatoria zizyphus*). An undescribed *Aonidia* was found thickly infesting the upper surface of the foliage of "cambuca" (*Myrciaria plicato-coatata*) from Brazil. Yams from the Philippine Islands exhibited a severe infestation with the tuber scale (*Targionia harti*). Larvæ of what appeared to be one of the potato weevils, *Rhigopsidius tucumanus*, referred to in last year's report, were again found in potatoes from Peru.

Pear seedlings from France have been found thickly infested with the European pear scale (*Epidiaspis pircola*).

Avocado seed from Guatemala, imported under special permit, were found to be riddled with galleries made by the larvæ of a species of weevil (*Conotrachelus* sp.).

In addition to the above, many insects of greater or less importance have been taken on plants of various descriptions. In all, some 165 species of insects have been reported on imported stock during the past year.

A single infection of the common scab (*Oospora scabies*) was discovered on potatoes from Canada. Potatoes from Canada were also found to be affected with *Rhizoctonia* and silvery scurf (*Spondylocladium atrovirens*). Powdery scab (*Spongospora subterranea*) was detected by inspectors of the State of Washington on potatoes from British Columbia.

Citrus canker was discovered on four shipments of citrus bud wood and on a collection of citrus herbarium material from the Philippine Islands. These interceptions were particularly fortunate in view of the fact that a part of the shipments were destined to go to citrus regions of California. Four shipments of citrus were found infected with wither tip (*Colletotrichum glaucosporioides*), three of which were received from the Philippine Islands and one from Japan. Melanose (*Phomopsis citri*) was detected by the California authorities on citrus from Japan. Kudzu from Japan was found to be affected with a rust known scientifically as *Woroninella puerariæ*.

In addition to the above, it was possible to identify the causal organism of some 85 specific diseases entering on imported stock.

## REGULATORY INVESTIGATIONS.

## FOREIGN INVESTIGATIONS.

The exigency created by the discovery of living larvæ of the pink bollworm in seeds of cotton contained in bales of imported Egyptian cotton, referred to in preceding pages, made it essential for this board to have additional information in regard to the life history of the pink bollworm and its damage to cotton and other plants. Early in May, 1915, an entomological assistant of the Bureau of Entomology was commissioned to go to the islands of Oahu and Hawaii to secure first-hand information on these points. Information furnished by him relative to the ability of the larva to easily penetrate closely woven cloth has already resulted in amending the Regulations Governing the Importation of Cotton Lint into the United States by eliminating the requirement that broken bales be patched at port of entry.

A number of permits were issued in the early summer of 1915 for the importation of potatoes from British Columbia, as the Department had information to the effect that the western coast of Canada was free from powdery scab. Notwithstanding this information, several suspicious looking imported potatoes, forwarded to Washington by our inspector at Seattle, proved to be infected with this disease. A scientific assistant of the Bureau of Plant Industry, then stationed at Jerome, Idaho, was authorized to proceed to British Columbia to determine, if possible, the source of the diseased potatoes. He found powdery scab at a number of places in British Columbia, and as a consequence all permits to import potatoes were promptly revoked.

## DOMESTIC INVESTIGATIONS.

The investigations necessary to the determination of quarantine lines and as a basis for proper regulatory action in connection with domestic quarantines have been conducted in cooperation with the Bureau of Plant Industry in relation to the potato quarantine, and in cooperation with the Bureau of Entomology in relation to the moth quarantine in New England. No special investigations were necessary in relation to any of the other domestic quarantines.

## LIST OF PLANTS AND PLANT PRODUCTS COVERED BY QUARANTINE.

The following is a list of the plants and plant products now under quarantine in accordance with the various notices of quarantine issued up to June 30, 1915:

Irish potatoes from Newfoundland, the islands of St. Pierre and Miquelon, England, Scotland, Wales, Ireland, and continental Europe, except Denmark and part of the Netherlands. The quarantine is still in force against the Provinces of Drenthe and Groningen in the Netherlands. There are no restrictions on the entry of foreign potatoes into the island of Porto Rico.

Irish potatoes from the States of Maine and New York, except under rules and regulations prescribed.<sup>1</sup>

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<sup>1</sup> Discontinued Sept. 1, 1915.



Cotton seed (including seed cotton) of all species and varieties and cottonseed hulls from all foreign localities and countries except the States of Neuvo Leon, Tamaulipas, Coahuila, Durango, Chihuahua, and Lower California, Mexico. Cotton seed (including seed cotton) of all species and varieties from the Mexican States mentioned may be imported under permit and bond for manufacturing purposes only. No restriction is placed on the use of cottonseed hulls imported from said States, or which may be obtained from cotton seed imported from said States.

Cotton seed and cottonseed hulls from Hawaii.

Seeds of the avocado or alligator pear from Mexico and the countries of Central America.

Oranges, sweet limes, mangoes, *Achras sapotes*, peaches, guavas, plums, and grapefruit, and their horticultural varieties, from Mexico.

All citrus nursery stock, including buds, scions, and seeds, from all foreign localities and countries. The term "citrus" as used here includes all plants belonging to the subfamily or tribe *Citratæ*.

Any fruit or vegetable from Hawaii upon which the Mediterranean fruit fly or the melon fly breeds, or which, from proximity of growth or the requirement of packing and shipping, may carry infestation, including alligator pears, bananas, carambolas, Chinese ink berries, Chinese oranges, Chinese plums, coffee berries, cucumbers, damson plums, eugenias, figs, grapes, grapefruit, green peppers, guavas, kamani nuts, kumquats, limes, loquats, mangoes, mock oranges, mountain apples, melons, Natal or Kafir plums, oranges, papayas, peaches, persimmons, pineapples, prickly pears, rose apples, star apples, string beans, squashes, and tomatoes, except that bananas and pineapples may be moved from the Territory of Hawaii in manner or method or under conditions prescribed in the regulations of the Secretary of Agriculture.

Cotton lint from Hawaii may be shipped to the continental United States only in accordance with the regulations prescribed in the notice of quarantine.

Living canes of sugar cane, or cuttings or parts thereof, from all foreign countries and from Hawaii and Porto Rico. There are no restrictions on the entry of such material into Hawaii and Porto Rico.

Indian corn from Java and India and Oceania, except Australia and New Zealand.

All five-leaved pines<sup>1</sup> from Europe and Asia.

Date palms or date-palm offshoots from Riverside County, Cal., east of the San Bernardino meridian; Imperial County, Cal.; Yuma, Maricopa, and Pinal Counties, Ariz.; and Webb County, Tex., shall be moved only in accordance with the rules and regulations applicable thereto.

Coniferous trees, such as spruce, fir, hemlock, pine, juniper (cedar), and arbor vitæ (white cedar), known and described as "Christmas trees," and parts thereof, and decorative plants of the area quarantined for the gipsy moth (certain parts of New England), such as holly and laurel, known and described as "Christmas greens or greenery,"<sup>2</sup> shall not be moved or allowed to move interstate to points outside the quarantined area.

<sup>1</sup> On and after July 1, 1915, all pines from all European countries and localities will be excluded.

<sup>2</sup> It is proposed to allow the movement of these articles on and after July 1, 1915, under regulation.



Forest plant products, including logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, and field-grown florists' stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, of the area quarantined for the gypsy moth (certain parts of New England), excepting fruit pits, seeds of fruit and ornamental trees and shrubs, field, vegetable, and flower seeds, bedding plants, and other herbaceous plants and roots, shall not be moved or allowed to move interstate to any point outside the quarantined area unless and until such plants and plant products have been inspected by the United States Department of Agriculture and pronounced free from the gypsy moth.

Deciduous trees or shrubs of the area quarantined for the brown-tail moth (certain parts of New England), or such parts thereof as bear leaves, including all deciduous field-grown florists' stock, vines, cuttings, grafts, and scions, but excepting forest-plant products, such as logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, shall not be moved or allowed to move interstate to points outside the quarantined area unless and until such plants and plant products have been inspected by the United States Department of Agriculture and pronounced to be free from the brown-tail moth. Coniferous trees and other evergreen trees are not affected by the brown-tail moth regulations.

In the case of all foreign quarantines the embargo is absolute.





